

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A method of structuring interactive content for mobile devices, comprising the steps of:

determining layout and rendering parameters based on mobile device information;

parsing requested content including a plurality of pages into a document having a plurality of discrete objects, each discrete object having a format based on at least said layout and rendering parameters;

generating a document table based on an object-by-object basis for said document, wherein the document table includes a first pointer and a second pointer associated with a discrete object, wherein the first pointer is used to access a method associated with the discrete object, and wherein the second pointer points to the discrete object;

~~serializing inputting~~ said document into a content stream, wherein said content stream includes the plurality of objects, ~~wherein objects of the plurality of objects are ordered according to a defined order within said content stream;~~

~~serializing inputting~~ said document table into said content stream according to said object-by-object basis; and

transmitting said content stream to a mobile device[[:]]

~~wherein the serialized document table contains at least one pointer to object data in the content stream.~~

2. (Original) The method of claim 1, wherein said object-by-object basis corresponds to distinguishable pieces of said request content.

3. (Previously Presented) The method of claim 1, whereby said document table provides points of reference to the objects of said document.

4. (Previously Presented) The method of claim 1, further comprising the steps of:

compressing said document according to said object-by-object basis; and
encrypting said document according to said object-by-object basis.

5-6. (Canceled)

7. (Previously Presented) The method of claim 1, further comprising the step of:

storing said content stream on a mobile device.

8. (Previously Presented) The method of claim 1, further comprising the step of:

modifying an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content.

9. (Currently Amended) The method of claim 8, wherein modifying step comprises the steps of:

(a) accessing an object pointer in said document table within said content stream, wherein said object pointer ~~contains~~ comprises the first pointer and the second pointer, wherein the first pointer is a vtable pointer for accessing instance methods and the first pointer is an attribute pointer for accessing said object within said content stream;

(b) copying said object to a new memory space for modification;

(c) altering said object with said instance methods; and

(d) updating the second pointer ~~said attribute pointer of said object pointer~~ to point to the memory space of said object that has been altered.

10. (Currently Amended) A computer system of structuring interactive content for mobile devices, comprising:

~~means for determining~~ a module to determine layout and rendering parameters based on mobile device information;

~~means for parsing~~ a module to parse requested content including a plurality of pages into a document having a plurality of discrete objects, each discrete object having a format based on at least said layout and rendering parameters;

~~means for generating~~ a module to generate a document table based on an object-by-object basis for said document, wherein the document table includes a first pointer and a second pointer associated with a discrete object, wherein the first pointer is used to access a method associated with the discrete object, and wherein the second pointer points to the discrete object;

~~means for serializing~~ a module to input said document into a content stream, wherein said content stream includes the plurality of objects, ~~wherein objects of the plurality of objects are ordered according to a defined order within said content stream;~~

~~means for serializing~~ a module to input said document table into said content stream according to said object-by-object basis; and

~~means for transmitting~~ a module to transmit said content stream to a mobile device[[;]]

~~wherein the serialized document table contains at least one pointer to object data in the content stream.~~

11. (Original) The system of claim 10, wherein said object-by-object basis corresponds to distinguishable pieces of said request content.

12. (Previously Presented) The system of claim 10, whereby said document table provides points of reference to the objects of said document.

13. (Currently Amended) The system of claim 10, further comprising:
~~means for compressing~~ a module to compress said document according to said object-by-object basis; and
~~means for encrypting~~ a module to encrypt said document according to said object-by-object basis.

14-15. (Canceled)

16. (Currently Amended) The system of claim 10, further comprising:
~~means for storing~~ said a module to store content stream on a mobile device.

17. (Currently Amended) The system of claim 10, further comprising:
~~means for modifying~~ a module to modify an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content.

18. (Currently Amended) The system of claim 17, wherein ~~means for modifying~~ said modifying module comprises:

~~means for accessing~~ a module to access an object pointer in said document table within said content stream, wherein said object pointer ~~contains~~ comprises the first pointer and the second pointer, wherein the first pointer is a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream;

~~means for copying~~ a module to copy said object to a new memory space for modification;

~~means for altering~~ a module to alter said object with said instance methods; and

~~means for updating~~ a module to update the second pointer ~~said attribute pointer of said object pointer~~ to point to the memory space of said object that has been altered.

19. (Currently Amended) A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for causing ~~an application program to execute on a computer that structures~~ to structure interactive content for mobile devices, said computer readable program code means comprising:

a first computer readable program code means for causing a computer to determine layout and rendering parameters based on mobile device information;

a second computer readable program code means for causing a computer to parse requested content including a plurality of pages into a document having a plurality of discrete objects, each discrete object having a format based on at least said layout and rendering parameters;

a third computer readable program code means for causing a computer to generate a document table based on an object-by-object basis for said document, wherein the document table includes a first pointer and a second pointer associated with a discrete object, wherein the first pointer is used to access a method associated with the discrete object, and wherein the second pointer points to the discrete object;

a fourth computer readable program code means for causing a computer to serialize input said document into a content stream, wherein said content stream includes the plurality of objects, wherein objects of the plurality of objects are ordered according to a defined order within said content stream;

a fifth computer readable program code means for causing a computer to serialize input said document table into said content stream according to said object-by-object basis; and

a sixth computer readable program code means for causing a computer to transmit said content stream to a mobile device[[:]]

~~wherein the serialized document table contains at least one pointer to object data in the content stream.~~

20. (Original) The computer program product of claim 19, wherein said object-by-object basis corresponds to distinguishable pieces of said request content.

21. (Previously Presented) The computer program product of claim 19, whereby said document table provides points of reference to the objects of said document.

22. (Currently Amended) The ~~method~~ computer program product of claim 19, said computer program product further comprising:

an eighth computer readable program code means for causing a computer to compressing said document according to said object-by-object basis; and

a ninth computer readable program code means for causing a computer to encrypting said document according to said object-by-object basis.

23-24. (Canceled)

25. (Currently Amended) The computer program product of claim 19, said computer program product further comprising:

an eighth computer readable program code means for causing a computer to store said content stream on a mobile device.

26. (Currently Amended) The computer program product of claim 19, said computer program product further comprising:

an eighth computer readable program code means for causing a computer to modify an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content.

27. (Currently Amended) The computer program product of claim 26, wherein said eighth computer readable program code means comprises:

a ninth computer readable program code means for causing a computer to access an object pointer in said document table within said content stream, wherein said object pointer ~~contains~~ comprises the first pointer and the second pointer, wherein the first pointer is a vtable pointer for accessing instance methods and the second pointer is an attribute pointer for access said object within said content stream;

a tenth computer readable program code means for causing a computer to copy said object to a new memory space for modification;

an eleventh computer readable program code means for causing a computer to alter said object with said instance methods; and

a twelfth computer readable program code means for causing a computer to update the second pointer ~~said attribute pointer of said object pointer~~ to point to the memory space of said object that has been altered.

28. (Previously Presented) A method of structuring interactive content for mobile devices, comprising:

determining layout and rendering parameters based on mobile device information;

parsing requested content into a document having a plurality of discrete objects, each discrete object having a format based on at least said layout and rendering parameters;

generating a document table based on an object-by-object basis for said document;

compressing said document according to said object-by-object basis;

encrypting said document according to said object-by-object basis;

serializing said document into a content stream according to said object-by-object basis;

serializing said document table into said content stream according to said object-by-object basis, wherein said document and said document table form said content stream according to said mobile device information; and

modifying an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content, wherein said modifying comprises:

accessing an object pointer in said document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream,

copying said object to a new memory space for modification,

altering said object with said instance methods, and

updating said attribute pointer of said object pointer to the memory space of said object that has been altered.

29. (Currently Amended) A computer system of structuring interactive content for mobile devices, comprising:

~~means for determining~~ a module to determine layout and rendering parameters based on mobile device information;

~~means for parsing~~ a module to parse requested content into a document having a plurality of discrete objects, each discrete object having a format based on at least said layout and rendering parameters;

~~means for generating~~ a module to generate a document table based on an object-by-object basis for said document;

~~means for compressing~~ a module to compress said document according to said object-by-object basis;

~~means for encrypting~~ a module to encrypt said document according to said object-by-object basis;

~~means for serializing~~ a module to serialize said document into a content stream according to said object-by-object basis;

~~means for serializing~~ a module to serialize said document table into said content stream according to said object-by-object basis, wherein said document and said document table form said content stream according to said mobile device information; and

~~means for modifying~~ a module to modify an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content, wherein means for modifying comprises:

~~means for accessing~~ a module to access an object pointer in said document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for accessing said object within said content stream,

~~means for copying~~ a module to copy said object to a new memory space for modification,

~~means for altering~~ a module to alter said object with said instance methods, and

~~means for updating~~ a module to update said attribute pointer of said object pointer to the memory space of said object that has been altered.

30. (Currently Amended) A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium for causing ~~an application program to execute on a computer~~ to structure that structures interactive content for mobile devices, said computer readable program code means comprising:

a first computer readable program code means for causing a computer to determine layout and rendering parameters based on mobile device information;

a second computer readable program code means for causing a computer to parse requested content into a document having a plurality of discrete objects, each discrete object having a format based on at least said layout and rendering parameters;

a third computer readable program code means for causing a computer to generate a document table based on an object-by-object basis for said document;

a fourth computer readable program code means for causing a computer to compress said document according to said object-by-object basis;

a fifth computer readable program code means for causing a computer to encrypt said document according to said object-by-object basis;

a sixth computer readable program code means for causing a computer to serialize said document into a content stream according to said object-by-object basis;

an seventh computer readable program code means for causing a computer to serialize said document table into said content stream according to said object-by-object basis, wherein said document and said document table form said content stream according to said mobile device information; and

a eighth computer readable program code means for causing a computer to modify an object of said content stream, wherein said object corresponds to distinguishable pieces of said request content, wherein said ninth computer readable program code means comprises:

a ninth computer readable program code means for causing a computer to access an object pointer in said document table within said content stream, wherein said object pointer contains a vtable pointer for accessing instance methods and an attribute pointer for access said object within said content stream,

a tenth computer readable program code means for causing a computer to copy said object to a new memory space for modification,

a eleventh computer readable program code means for causing a computer to alter said object with said instance methods, and

a twelfth computer readable program code means for causing a computer to update said attribute pointer of said object pointer to the memory space of said object that has been altered.

31. (Previously Presented) The method of claim 1, wherein each object of the plurality of objects is associated with one of said pages, wherein each of said pages has an assigned priority, and wherein objects of the plurality of objects are ordered within said content stream according to the priority assigned to pages with which the objects are associated.

32. (Currently Amended) The system of claim 10, wherein each object of the plurality of objects is associated with one of said pages, wherein each of said pages has an assigned priority, and

wherein the ~~means for serializing~~ module ~~said document~~ is configured to order objects of the plurality of objects within said content stream according to the priority assigned to pages with which the objects are associated.

33. (Previously Presented) The computer program product of claim 19, wherein each object of the plurality of objects is associated with one of said pages, wherein each of said pages has an assigned priority, and

wherein the fourth computer readable program code means is configured to order objects of the plurality of objects within said content stream according to the priority assigned to pages with which the objects are associated.